

## C L A I M S

1. Light source, in particular incandescent lamp, with a bulb (1), a filament (2) arranged in the bulb (1), and a heating device (3) for the filament (2), the filament (2) emitting both visible light and heat radiation,  
**characterized in** that the heating device (3) includes a heating element (4) for indirectly heating the filament (2).

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2. Light source of claim 1, characterized in that the filament is constructed in the form of a strip or as a surface filament.

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3. Light source of claim 1, characterized in that the filament (2) is constructed in the shape of a cup, cylinder jacket, or as a volume filament.

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4. Light source of claim 1, characterized in that the filament is constructed as a cylinder jacket half.

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5. Light source of claim 1, characterized in that the filament (2) is constructed as an open, lengthwise slotted cylinder jacket.

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6. Light source of one of claims 3-5, characterized in that the diameter of the cylinder jacket or cylinder jacket half is only slightly smaller than the diameter of the bulb (1). *A*

7. Light source of one of claims 1-6, characterized in that the filament (2) is arranged in the bulb (1) in concentric relationship.

8. Light source of one of claims 1-7,  
characterized in that the filament (2) is arranged in  
coaxial relationship with a longitudinal axis of the bulb  
5 (1).

9. Light source of one of claims 1-8,  
characterized in that the filament (2) contains tungsten  
and/or rhenium and/or tantalum and/or zirconium and/or  
10 niobium, preferably in a sintered form.

10. Light source of one of claims 1-9,  
characterized in that the filament is composed at least  
in part of a nonmetal.

15 11. Light source of one of claims 1-10,  
characterized in that the filament is composed at least  
in part of tantalum carbide and/or rhenium carbide and/or  
niobium carbide and/or zirconium carbide.

20 12. Light source of one of claims 1-11,  
characterized in that the heating element (4) is an  
incandescent element, which is heated by an electric  
current.

25 13. Light source of claim 12, characterized in that  
the incandescent element is a heating coil.

30 14. Light source of claim 12 or 13, characterized  
in that the incandescent element is arranged within a  
space or half space formed by the filament (2),  
preferably within a cylinder jacket or a cylinder jacket  
half.

15. Light source of claims 12-14, characterized in that the incandescent element is made from tungsten.

16. Light source of one of claims 1-15,  
5 characterized in that the filament (2) is attached to a power supply conductor (5) for the heating element (4).

17. Light source of one of claims 1-16,  
characterized in that for the indirect heating of the  
10 filament magnetic inductors are arranged in the bulb.

18. Light source of one of claims 1-17,  
characterized in that for the indirect heating of the  
filament magnetic inductors are arranged outside of the  
15 bulb.

19. Light source of one of claims 1-18,  
characterized in that the bulb (1) includes a mirror  
coating (7) on its inner side.

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20. Light source of claim 19, characterized in that the mirror coating (7) is formed by a dielectric multilayer coating.

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21. Light source of one of claims 1-20,  
characterized in that an inert gas and/or a halogen gas are present in the bulb (1).

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22. Light source of claim 21, characterized in that the halogen gas contains bromine and/or iodine.

23. Light source of one of claims 1-22,  
characterized in that the filament (2) and/or the  
incandescent element are coated with a coating material,

which has a higher melt point than the filament material and/or the material of the incandescent element.

24. Light source of claim 23, characterized in that  
5 the coating material contains tantalum carbide and/or rhenium carbide and/or niobium carbide and/or zirconium carbide.

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